

### ABSTRACT OF THE DISCLOSURE

There is provided a manufacturing apparatus of a porous glass base material which can prevent soot from being formed on an upper surface (ceiling) of the process chamber, and reduce the amount of soot that comes off the upper surface and falls. A manufacturing apparatus of a porous glass base material 4 deposits glass particles produced by subjecting a material gas to flame hydrolysis, onto a starting member 1 placed vertically. Here, a plurality of gas inlets 5 are provided in one or more lateral walls of a process chamber including a burner 2 for the deposition therein, in upper portions of the lateral walls and along a ceiling of the process chamber.